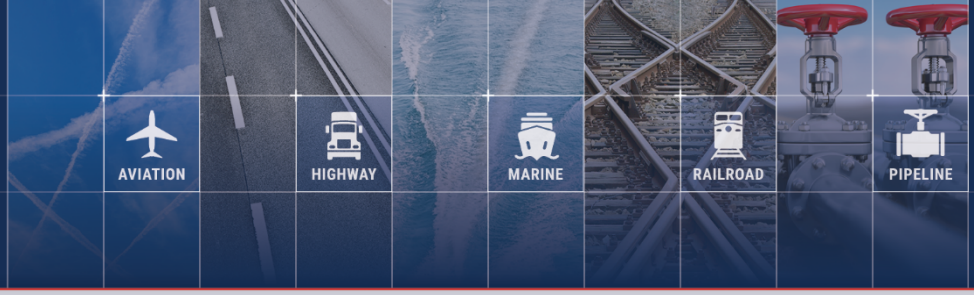

Aviation Investigation Final Report

Location:	Kodiak, Alaska	**Accident Number:**	ANC22FA005
Date & Time:	November 7, 2021, 14:02 Local	**Registration:**	N540AK
Aircraft:	GERALD JONES 2+2	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

Numerous witnesses reported that, shortly after takeoff, the airplane entered a steep right turn, the nose dropped, and the airplane entered a spiraling descent in a near-vertical attitude.

A postaccident examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation. The damage to the airplane and surveillance video were consistent with a near-vertical descent indicative of an aerodynamic stall. Based on the available information, it is likely that the pilot failed to maintain sufficient airspeed while maneuvering, which resulted in an exceedance of the airplane's critical angle of attack and a subsequent aerodynamic stall.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to maintain adequate airspeed while maneuvering, which resulted in an exceedance of the airplane's critical angle of attack and an aerodynamic stall.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Airspeed - Not attained/maintained
Aircraft	Angle of attack - Capability exceeded

Factual Information

History of Flight

Takeoff	Loss of control in flight (Defining event)

On November 07, 2021, about 1402 Alaska standard time, an experimental, amateur-built 2+2 airplane, N540AK, sustained substantial damage when it was involved in an accident near Kodiak, Alaska. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot departed from Kodiak Municipal Airport (KDK), Kodiak, Alaska, destined for a remote off-airport landing site near Saltery Cove. A friend of the pilot reported that the purpose of the flight was to transport hunting gear to the remote location to establish a hunting camp.

Numerous witnesses reported that, shortly after departure from KDK, the airplane entered a steep right turn, the nose dropped, and the airplane entered a spiraling descent in a near-vertical attitude.

The airplane impacted a gravel road at an elevation of about 92 ft mean sea level. A surveillance camera captured the impact sequence and showed the airplane impact in a right-wing-low, near-vertical attitude. The airplane came to rest about 25 ft from the initial impact site in a heavily wooded area and sustained substantial damage to the fuselage, wings, and tail.

A postaccident examination of the airframe and engine revealed no pre-accident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Pilot Information

Certificate:	Private	**Age:**	39,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	June 28, 2017
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	(Estimated) 200 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GERALD JONES	**Registration:**	N540AK
Model/Series:	2+2	**Aircraft Category:**	Airplane
Year of Manufacture:	2018	**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	001
Landing Gear Type:	Tailwheel	**Seats:**	4
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	LYCOMING
ELT:		**Engine Model/Series:**	O-540 SERIES
Registered Owner:	On file	**Rated Power:**	250 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PADQ,80 ft msl	**Distance from Accident Site:**	5 Nautical Miles
Observation Time:	13:53 Local	**Direction from Accident Site:**	227°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	11 knots / 19 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	320°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.74 inches Hg	**Temperature/Dew Point:**	2°C / -5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Kodiak, AK	**Type of Flight Plan Filed:**	None
Destination:	Kodiak, AK	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	57.805489,-152.36548

Administrative Information

Investigator In Charge (IIC):	Banning, David
Additional Participating Persons:	Mathew Dahl; FAA; Soldotna, AK Mark Platt; Lycoming; PA
Original Publish Date:	August 31, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=104214

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties … and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.